

## ZISA IS500/510

### Channelized Industrial Ethernet Switch



IS500 series



IS510

### Overview

IS500/IS510 is the channel isolated Ethernet switch, supports ring and chain topology over 1.25Gb/s optical fiber. It supports 1+1 optical protection, provides intelligent redundancy for Ethernet network and bring the reliability for the whole network (the network self-healing time is less than 5ms).

IS500 is used as the central office traffic aggregator; adopts 19 inch and 1U height standard chassis, provides three gigabit Ethernet interfaces (2 copper and 1 fiber Ethernet interfaces) compliant with IEEE 802.3 series standard, and two 1.25Gb/s optical interface. IS500 can connect up to 64 remote IS510, the bandwidth of each channel can be 10M~100M, and all the channels are isolated from each other.

IS510 is the compact designed Ethernet switch, used as the remote equipment of the IS500, it supports four 10M/100M Ethernet interfaces, supports VLAN and port-rate control function.

With low power consumption, high integration and well stability, IS500/IS510 is cost-competitive solution for the application such as the telecommunication, the electric power and the finance fields.

### Feature

- Transmission channels physically isolated · 64-ch remote Ethernet go through to central office without any store and forward process
- Each transmission bandwidth can be set from 10M to 100M in granularity of 10M, the default bandwidth is 10M
- Save fiber resources, only one fiber is needed to achieve point-to-multipoint transmission for up to 64 Ethernet channels
- Optical interface

- ✓ Two optical interfaces; SFP optical module (LC interface); Hot plugging
- ✓ The line bit rate is 1.25Gb/s, transmission distance is optional (depend on the SFP optical module)
- ✓ Supports optical loop for failure location
- ✓ Supports Remote Power Down detection (RPD)
- ✓ Supports optical 1+1 protection with network self-healing time of less than 5ms
- Ethernet interface
  - ✓ Compliant with IEEE802.3 serial standard
  - ✓ IS500:One fiber and two copper Gigabit Ethernet interfaces
  - ✓ IS510: Four fast Ethernet interfaces
  - ✓ 1.25G SFP module, working in 1000M full-duplex mode, transmission distance is optional (depend on the SFP optical module)
  - ✓ RJ45 connector, auto-negotiation, working in 1000M full-duplex, 100M full/half-duplex, 10M full/half-duplex mode;
  - ✓ Proprietary technique adopted to prevent the broadcast storm of the Ethernet network in case of unexpected Ethernet port loopback
    - ✓ Supports broadcast storm filtering control;
    - ✓ Supports MAC address dynamic learning;
    - ✓ Supports port-based VLAN and IEEE802.1Q tag-based VLAN.
- Supports Remote Power Surveillance(RPS) to detect remote power degradation
- Supports ring and chain topology and auto topology discovery
- Supports WEB and CLI management
- Supports status and performance management for each Ethernet channel
- IP40 grade and -40℃~+85℃ wide temperature range design, more durability
- IS500: Power supply redundancy protection with consumption of less than 15W
  - ✓ -48V DC or 220V AC single power supply;
  - ✓ -48V DC+220V AC double power supply;
- IS510: 12V DC power supply with consumption of less than 5W

## Application

IS500 and up to 64 remote IS510 can compose dual chain topology, dual fiber and dual direction ring topology and single fiber and dual direction ring topology, and all the Ethernet channels from remote to local are isolated from each other, as Figure 3-1, 3-2, 3-3 shows.

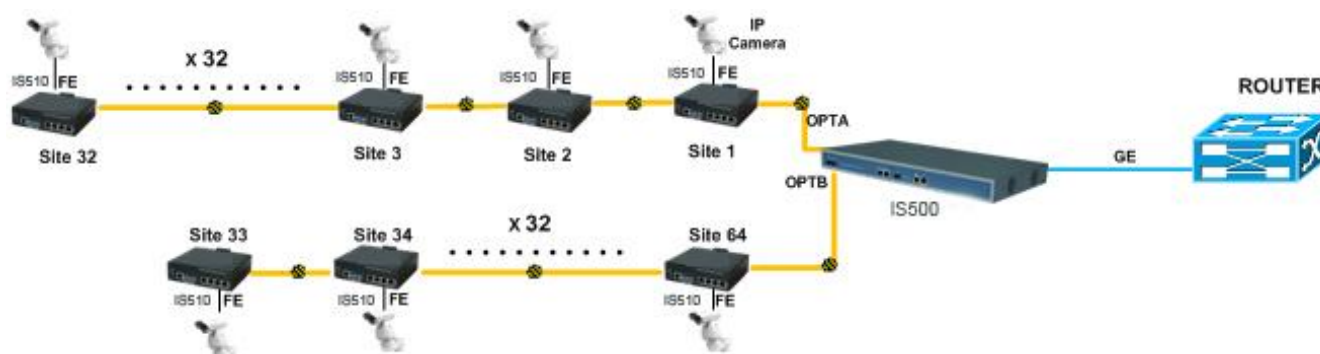


Figure 3-1 Dual chain topology

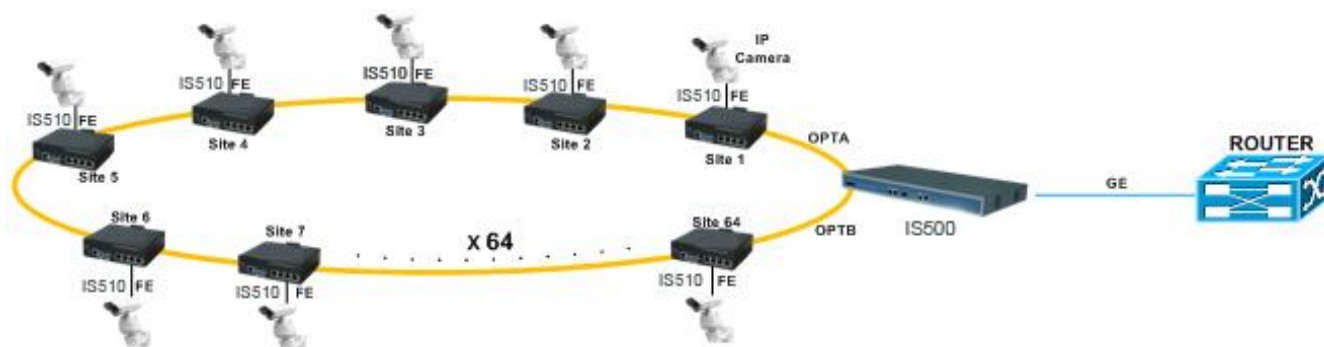


Figure 3-2 Dual fiber and dual direction ring topology



Figure 3-3 Single fiber and dual direction ring topology

## Products List

IS500-32: 32 ports switch

IS500-64: 64 ports switch

IS510: Terminal

### **ZISA Corporation Limited**

Tel: +86-10-52885062 Fax:+86-10-58236899

Mail to : sales@zisacom.com.cn

URL: <http://www.zisacom.com.cn>

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